AUTHOR INDEX

Adachi, K., 283
Aguilar, J. S., 273
Agut, J., 293
Ando, K., 283
Appleyard, M. E., 397
Arias, H. R., 101

Bailly, D. A., 149
Barat, A., 425
Barrantes, F. J., 101
Barrit, M.-C., 55
Bastiaensen, E., 313
Batuecas, A., 417, 425
Baxter, C. F., 199
Belakebi, M., 223
Bertolini, M., 261
Besio Moreno, M., 17
Bidaut-Russell, M., 287
Billingsley, M. L., 463
Biondi, C., 119
Bizzozero, O. A., 17
Blanco, I., 451
Blanot, F., 219
Bocchieri, P., 183
Bojorge, G., 11
Brandner, R., 451
Brooks, J. C., 31, 407
Brooks; M. H., 31, 407
Brunelli, M., 119
Burt, D. R., 63
Butcher, S. P., 95

Cabezas, J. A., 383
Cabon, F., 219
Carlberg, M., 161
Chai, M. S. Y., 135
Chiu, T. H., 69
Cronin-Golomb, A., 347
Cubero, A., 417, 425
Cunningham, M., 209

De Robertis, E., 255, 273
Derby, P., 199
Dimaline, R., 433
Djamgoz, M. B. A., 23
Dockray, G. J., 433
Drejer, J., 77
Dreyfus, P. A., 189

Elofsson, R., 161

Fages, C., 223
Farkas, Z., 443
Faudon, M., 55
Fernández-Quero, S., 417
Ferrer, I., 451
Ferretti, M. E., 119
Fowler, C. J., 359
François-Bellan, A.-M., 55
Frandsen, A., 77

Galton, N., 209
Garcia, L., 189
Ghosh, J. J., 49
Giannaccini, G., 261
Goswami, S., 49
Goujet-Zalc, C., 219
Grondal, E. J. M., 107
Gustavsson, S., 155
Guzman-Harty, M., 169

Hagberg, H., 95
Hamberger, A., 95
Hara, F., 331
Hery, F., 55
Hery, M., 55
Hommes, F. A., 1
Honoré, T., 77
Hosono, R., 323
Hossain, M. A., 49
Howlett, A. C., 287
Hueso, P., 383
Hungen, K. von, 199

Isetta, A. M., 433
Ito, J.-i., 331
Ito, M., 69

Joó, F., 443
Juszczak, R., 389

Kano-Tanaka, K., 331
Karlsson, J.-O., 155
Karten, H. J., 23
Kása, P., 443
Kato, T., 331
Kinemuchi, H., 359
Kontro, P., 113
Kuhn, D. M., 463
Kumazawa, T., 283
Kuno, S., 323

LeCluyse, E., 209
Lopez G.-Coviella, I., 293
Lucacchini, A., 261

Makar, T. K., 49
Mallet, J., 219
Malminen, O., 113
Marangos, P. J., 339
Marchi, M., 183
Markowitz, D., 169
Martini, C., 261
Matsuo, K., 1
McNamee, M. G., 175
Medina, J. H., 255
Medrano, S., 175
Meyer, W., 241
Michaelis, E., 209
Michaelis, M., 209
Mokrasch, L. C., 305
Morgan, P. F., 339

Nagatsu, T., 89, 375
Naoi, M., 89
Newcomb, R. W., 229
Nicolet, M., 189
Nordmann, J. J., 229
Novas, M. L., 255
Nunez, J., 229

Ochoa, E. L. M., 175
Oda, S., 283

Paladini, A. C., 255
Pasquini, J. M., 17
Peña, C., 255
Periyasamy, S., 69
Picatoste, F., 451
Pinçon-Raymond, M., 189
Plummer, D. T., 135
Poehling, H. M., 241
Portolan, A., 119
Potter, W. de, 313
Prince, D. J., 23
Pruss, R. M., 299

Raiteri, M., 183
Ramirez, G., 417, 425
Rhyner, T., 219
Riederer, P., 379
Rieger, F., 189
Rodrigo, M., 383
Rodriguez, J., 451
Rodriguez, R., 451
Rodriguez de Lores Arnaiz, G., 11
Roy, S., 209

Sabria, J., 451
Sandberg, M., 95
Sarkar, P. K., 83
Sassa, T., 323
Schmidt, W., 39
Schoepp, D. D., 149
Schousboe, A., 77
Sentis, M., 451
Sharif, N. A., 63
Sil, M., 83
Singh, I. S., 49
Sloley, B. D., 265
Smith, A. D., 397
Smith, G. C., 143
Sonetti, D., 119
Soto, E. F., 17

Stelzl, H., 107
Stock, S. M., 169
Strange, P. G., 389

Takahashi, T., 89
Tanaka, R., 351
Tardy, M., 223
Tipton, K. F., 359
Toldi, J., 443
Toledo, A., 451
Trizio, D., 433

Varro, A., 433
Verdière-Sahuqué, M., 189
Versace, P., 183
Vidal, C. J., 135
Von Borstel, R., 293

Weibel, M., 223
White, W. F., 63
Williams, R. G., 433
Willis, G. L., 143
Wilson, M. S., 169
Wolf, G., 39
Wolff, J. R., 443
Wurtman, R. J., 293

Yates, A. J., 169
Youdim, M. B. H., 379
Yu, P. H., 265

Zalc, B., 219
Zamir, N., 299
Zimmermann, H., 107

SUBJECT INDEX

Acetylcholine: nicotinic receptor of *Torpedo* 175
  release of synaptosomes 295
Acetylcholine release: inhibition by sodium bromide 443
Acetylcholinesterase: different molecular forms 329 190
  effect of temperature 135
  from muscle microsomes 329
  from skeletal muscle 329
  in frog muscle sheaths 189
  in rat brain 135
  release from hippocampus 397
  spontaneous and carbachol-evoked release 397
Adrenaline: depletion of brain stores 347
  levels in different areas of rat brain 349
  synthesis and effect of inhibitors 347
Alcohol: effect on gangliosides 383
  effect on glutamate binding protein 209
Amantadine: effect on nicotinic receptor 175
Angiotensin: stimulation of phosphoinositide hydrolysis 149
Antibodies: to tyrosine-hydroxylase 463
Arachnida: neurotransmitters in the CNS 241
D-Aspartate: uptake by synaptosomes 339
Astroglial cells: 223
Astroglial growth factor: increases α-tubulin 223
ATP: in rat brain 356
  released from cholinergic synaptosomes 295
ATPase: of cholinergic synaptic vesicles 107

Barbiturate sites 417
Basal lamina sheaths: characteristics of acetylcholinesterase 189
Benzodiazepine: receptor 113
Benzodiazepine/GABA receptor: purification 253
Benzodiazepines: effect on GABA metabolism 49
Benzodiazepine binding: to tectal membranes 418
Benzodiazepine receptors: effect of taurine 417 113
Binding: of benzodiazepines 418
  of [^{3}H]flunitrazepam 425
  of glutamate 209
  of [^{3}H]muscimol 425
  of opiates 210
Botulinum toxin: does not block ATP release 295
Brain: gangliosides in different areas 383

Calcium: dependency for vesicular ATPase 107
  role in myelin proteins 17
Ca^{2+}-dependent protease: calpain 155
Calcitonin gene related peptide: does not cross with cholecystokinin antibody 433
Calpain: effect on transport of proteins 155
Carbachol: release of acetylcholinesterase 397
Catecholamine: degeneration in hypothalamus 143
  levels in areas of rat brain 349
Cholecystokinin: immunocytochemical studies 433
  in CNS 433
  monoclonal antibodies 433
Cholecystokinin antibody: does not cross react with CGRP 433
Cholinergic synapses: effects of phorbol esters 323
Cholinergic synaptosomes: release of ATP 295
Cholinergic vesicles 107
Chromaffin cells: in culture 31
  effect of MPTP 311
  protein thiophosphorylation 407
Cobalt: role in transfer of myelin proteins 17
Coelenterates: presence of DOPA and 5-OH-DOPA 161
Convulsant/barbiturate sites 417
Copper: in myelin 281
Creatine phosphate: in rat brain 356
Cultures: of chromaffin cells 311
c-AMP: levels in snail CNS 119
L-Cycloserine: effect on gangliosides 169
L-Cystathionine: transamination in brain 337

Development: of aspartate aminotransferase activity in brain 39
  of brain 1
  of gangliosides in mouse brain 169
  of mast cell histamine 451
3,4-Dihydroxyphenylalanine (DOPA): in coelenterates 161
3,4,5-Dihydroxyphenylalanine (5-OH-DOPA): in coelenterates 161
Diazepam: effect on GABA metabolism 49
Dopamine: effects on c-AMP levels in snail CNS 119
  histochemical detection 143
  influenced by gamma-butyrol acetone 275
  in lateral hypothalamus 143
Dopamine release: regulated by muscarinic receptors 183
Dopaminergic neurotoxicity: and MPTP 379

Electrocyte membranes: minor phospholipids 101
Ependymins: goldfish glucoproteins 383
  in goldfish brain 383
  measured by radioimmunoassay 383
Estrogen: modulatory agiotensin stimulation of phosphoinositides 149

Feed-back inhibition: of ornithine aminotransferase by GABA 391
Filters: binding by 8-OH-DPAT 371
[^{3}H]Flunitrazepam binding: to optic tectum membrane 425

GABA: benzodiazepine complex 113
  effect on serotonin release 55
  interrelationships with ornithine and glutamate 391
GABA/benzodiazepine receptor: purification 253
GABA metabolism: effect of benzodiazepines 49
GABA receptors: development 417
$GABA_A$ receptors: in chick tectum 425
  ontogeny 425
$GABA_B$ receptors: effect on serotonin release 55
GABA transaminase: effect of inhibitors on S-potentials 23
  in rat brain 51
  in retina 23
  localisation in retina 23
GAD (glutamate decarboxylase): activity in rat brain 51
  monoclonal antibodies 287
Gamma-butyrolactone: effect on dopamine and metabolites 275
Ganglion cells: transport of proteins
Gangliosides: effect of chronic alcohol treatment 383
  effect of L-cycloserine 169
  in brain areas, liver and kidney 383
  in mouse brain 169
Glucose: in rat brain 356
Glutamate: binding to frozen/thawed membranes 69
  effect on aspartate release 77
  interrelationships with GABA and ornithine 391
Glutamate binding 209
Glutamate binding protein: in brain of rats 209
  localisation 209
Glutamate receptors: binding analysis 69
Glutamine transaminase: purification 377
Glycoproteins: ependymins in goldfish brain 383
Granule cells: adenosine receptors 77

Growth factor: of astroglial cells 223
2-Guanidinoethane: effect on taurine 265

Haloperidol: monoclonal antibodies 389
Histamine: in developing rat 451
Hippocampus: release of acetylcholinesterase 397
HPLC: of neurophysin 229
Hydroxy-2-di-n-propylamino-tetralin = 8-OH-DPAT
6-Hydroxydopamine: injection into hypothalamus 143
5-Hydroxytryptamine = serotonin
Hyperphenylalaninemia 1
Hyperpoxia: in newborn rat brain 355
Hypoglycemia: effects of 2-amino-5-phosphonovalerate 95
  purine catabolites and amino acid levels in striatum 95

Immunoreactive: glutamate binding protein 209
Inositol phosphates: stimulation by angiotensin 149
Insect CNS: protein kinase C 323
Insulin: effect on ATPase activity 11
Ischemia: effect on labelling of phosphoinositides 361

Kainate: effect on amino acids 265
Kainic acid: elicits supersensitivity on muscarinic receptors 183
  intrastriatal injection 183
Kidney: gangliosides 383

Lactate: in rat brain 356

Manganese: in myelin 281
MAO: role in MPTP neurotoxicity 361
Mast cells: histamine 451
N-Methyl-4-phenylpyridinium ion (MPP^+): uptake into PC12h cells 89
1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine = MPTP
Microdialysis 265
Microsomes: acetylcholinesterase 329
Modulation: of angiotensin effects by estrogen 149
  of serotonin receptors 199
Monoamine oxidase = MAO
Monoclonal antibodies: against haloperidol 389
Monoclonal antibodies: to cholecystokinin 433
  to GAD 287
MPTP: effects on cultured chromaffin cells 311
  induced dopaminergic neurotoxicity 379
  its relevance to Parkinson's disease 359, 375
  neurotoxicity 359
Muscarinic receptors: inducement of supersensitivity 183
  regulation of dopamine release 183
[^{3}H]Muscimol: binding 425
Myelin: effect of cobalt on proteins 17
  effects of calcium on protein 17
  effect of hyperphenylalaninemia 7
  occurrence of manganese, copper and zinc 281
  proteins 17
Myelinogenesis: and tubulin biosynthesis 83

Neurophysin: analysis and processing 229
Neurotoxicity: of MPTP 359
Neurotransmitters: in CNS of spiders 241
Nicotinic receptor: effects of amantadine 175

8-OH-DPAT: binding to serotonin receptors 371
8-OH-DPAT binding: artifacts in serotonin binding studies 372
Oligodendrocytes: biosynthesis of tubulin 83
Ontogeny: of $GABA_A$ receptors 425
Opiates: synthesis of binding sites 219
Optic tectum: development of neurotransmitter recognition sites 425
  $GABA_A$ receptors 417
Ornithine: interrelationships with glutamate and GABA 391
Ornithine aminotransferase: effects of brain levels 391
Ornithine aminotransferase: inhibition 391
Oxazepam: effect on GABA metabolism 49
Oxygen toxicity: in newborn brain 355

Parkinson's disease: and MPTP 375
  relation to MPTP treatment 359
PC-12 cells: tyrosine hydroxylase 463
PC12h Pheochromocytoma cells: uptake of MPP^+ 89
Phenylethanolamine-N-methyltransferase (PNMT): inhibitors 347
Phenylalanine: effects on sulfatides 1
Phorbol esters: effect on cholinergic synapses 323
Phosphatidylcholines: modulate serotonin receptors 199
Phosphoinositides: effect of ischemic treatment 361
  in rat brain membranes 361
Phosphoinositide hydrolysis: effect of angiotensin 149
Phospholipases: effect on Na^+, K^+-ATPase 303
  effect on phospholipid perturbation 303
Phospholipids: effect on serotonin receptors 200
  of electrocyte membranes 101
Phospholipid perturbation: effect of phospholipases 303
Phosphorylation: of cell proteins 31
  of phospholipids in electrocyte membranes 101
Pituitary: angiotensin receptors linked to phosphoinositide hydrolysis 149
Polymyxin B: protein kinase C inhibitor 323
Prostaglandin E_2: effect on c-AMP levels in snail CNS 119
Protein kinase C: in insects 323
Purine catabolites: in hypoglycemia 95

Quaking mutant: myelin 281

Radioimmunoassay: of ependymins 383
Receptor: purification of GABA/benzodiazepine 253
Receptors: angiotensin linked to phosphoinositide hydrolysis 149
Release: of acetylcholinesterase 397
Retina: GABA transaminase localisation 23
Retinal: ganglion cells 155

Saponin permeabilized: cultured cells 31
Serotonin: binding sites for 8-OH-DPAT 371
  effects on C-AMP levels in snail CNS 119
Serotonin receptors: modulation by phosphatidyl choline 199
Serotonin release: $GABA_B$ receptors 55
Shiverer mutant: myelin 281
Na^+, K^+-ATPase activity: effect of phospholipases 303
Na^+, K^+-ATPase: effect of insulin 11
  in synaptosomal mambranes 11
Sodium bromide: effect on synaptic transmission 443
  inhibits acetylcholine release 443
Spiders: CNS neurotransmitters 241
S-potentials: role of GABA transaminase 23
Striatum: levels of amine transmitters 278
Sulfatides: effects of phenylalanine 1
Suprachiasmatic area: $GABA_B$ receptors and serotonin release 55
Synaptic transmission: effect of sodium bromide 443
Synaptic vesicles: ATPase 107
Synaptosomal membranes: Na^+, K^+-ATPase activity 11
Synaptosomes: release of ATP 295
  uptake of D-aspartate 339
Synthesis: of opiate binding sites 219

Taurine: action on GABA/benzodiazepine receptors 113
  depletion 265
Thiophosphorylation: effect of drugs 407
  in chromaffin cells 407
  of cell proteins 31
Thyrotropin-releasing hormone (TRH) 63
Transamination: of L-cystathionine 377
Transport: of proteins in ganglion cells 155
Trembler mutant: myelin 281

TRH receptors; autoradiographical and biochemical analysis 63
in mouse spinal cord 63
TRH receptors: in normal and spastic mouse 63
Triiodothyronine: regulates tubulin synthesis 83
α-Tubulin: increased by astroglial growth factor 223
Tubulin: biosynthesis in oligodendrocytes 83
Tubulin biosynthesis: regulated by triiodothyronine 83
Tyrosine hydroxylase: antibodies 463
from PC-12 cells 463
Tyrosine mediated accumulation: in coelenterates 161

Uptake: of D-aspartate 339

Vesicular ATpase: calcium dependency 107

Zinc: in myelin 281

PRINTED IN ENGLAND BY A. WHEATON & CO. LTD, EXETER